



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/599,791

10/10/2006

Takeo Noguchi

AOYAP0103US

4630

43076

7590

03/05/2009

MARK D. SARALINO (GENERAL)  
RENNER, OTTO, BOISSELLE & SKLAR, LLP  
1621 EUCLID AVENUE, NINETEENTH FLOOR  
CLEVELAND, OH 44115-2191

EXAMINER

WALDBAUM, SAMUEL A

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

03/05/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,791	<b>Applicant(s)</b> NOGUCHI, TAKEO	
	<b>Examiner</b> SAMUEL A. WALDBAUM	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 4-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/10/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4-9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 4 is indefinite. Claim 4 states that the "the unbendable first door" and it is not clear as to what unbendable reference. First off materials, like glass, metal, plastic and such are bendable under different conditions, thus it is not clear if the unbendable is referring to the material of the door. Unbendable also can refer to the fact that the door is one unit and does not bend in any shape. Thus the claim is indefinite. This claim will be interpreted in a way that the first door is made up of a rigid material and that the door is a singular unit, meaning as it moves vertically the door does not bend and change its shape.

4. Claim 5-9 are rejected as indefinite since they depend off claim 4.

5. Claim 9 recites the limitation "the spring" in line 1. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1792

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitton et al (U.S. pgpub 2003/0172689, hereafter `689) in view of Fumagalli (EP1408150, hereafter `150).**

8. Claim 4: `689 is a washing machine that has a housing (fig. 1 and 2, part 12, front panel part 14) with a water tank (fig. 2, part 34), a rotating drum within the water tank (fig. 2, part 38, [0029]) a first door attached to the housing (fig. 2 and 3, part 26, [0025]) and a second door pivotally mounted to the water tank (fig. 2 and 3, part 42, [0027]). `689 does teach that the dimensions of the washing machine can be varied to suit requirements ([0023]). `689 does not teach that the first door is slidable in vertical direction. `150 is a washing machine. `150 teaches that the front door can vertically slide to a open and closed position (fig. 4 and 5, part 5, [0031]-[0035]) where the door is a made up a unbendable rigid material ([0023) to reduce the space need by the outer door since it no longer needs to swing out ([0004] and [0057]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the outer door slide vertically to an open and closed position as taught by `150, by varying the dimension of apparatus `689 to accommodated the sliding door thus reducing the space need by the outer door since it no longer needs to swing out.

Art Unit: 1792

9. Claim 5: `150 teaches that the sliding door, slide below the opening for the water tank (fig. 2).

10. Claim 7: `689 teaches that the outer door is circular ([0030]) and `150 teaches that that outer sliding door is substantially rectangular ([0020]). It would have been an obvious matter of design choice to give the first door a general arc shape cross-section, since such a modification would have involved a mere change in the shape of a component. A change of shape is generally recognized as being within the ordinary level of skill in the art. *In re Dailey*, 357 F.2<sup>nd</sup> 669, 149 USPQ 1966.

**Claim 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitton et al (U.S. pgpub 2003/0172689) in view of Fumagalli (EP1408150) as applied to claim 4 above, further in view of Ito et al (U.S. 6,557,383, hereafter `383).**

`689 and `150 teach all the limitations of claim 4.

11. Claim 6: `689 and `150 do not show that the water tank and the rotating drum is slanted. `383 is a washing machine. `383 teaches that the tank and drum can be slanted downwards from the opening (fig. 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have slanted the washing tank and drum as taught by `383 in apparatus `689 in view of `150 to have yield the predictable result of having the water collect in the rear of the drum and tank.

**Claim 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitton et al (U.S. pgpub 2003/0172689) in view of Fumagalli (EP1408150) as applied to claim 4 above, further in view of Tajundeen et al (U.S. 5,513,469, hereafter `469).**

`689 and `150 teach all the limitations of claim 4.

Art Unit: 1792

12. Claim 8: `150 teaches automatic actuating means to manual means for moving the sliding door ([0037]-[0040] and [0049]). `689 and `150 do not teach a spring for biasing the movement of the sliding door. `469 is solving the same problem as the applicant of controlling the movement of a sliding door. `469 teaches the use of a spiral spring to bias the movement of the sliding door (abstract, col. 4, lines 3-30). All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, meaning that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a spiral spring as taught by `469 in apparatus `689 in view of `150 to yield the predictable result of biasing the movement of the sliding the door.

**Claim 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitton et al (U.S. pgpub 2003/0172689) in view of Fumagalli (EP1408150) as applied to claim 4 above, further in view of Tajundeen et al (U.S. 5,513,469) and Thomsen (U.S. 4,921,230, hereafter `230).**

`689 and `150 teach all the limitations of claim 4.

13. Claim 9: See claim 8 above. `689, `150 and `469 teach a spiral spring but does not state it is a flat spiral spring. `230 teaches the use of a flat spiral spring to bias movement. `230 teaches that spiral springs are commonly made up from flat sheet metal (col. 1. lines 7-15), thus a flat spiral spring. All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of

Art Unit: 1792

ordinary skill in the art at the time of the invention, meaning that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a spiral spring as taught by `469 is a flat spiral spring as taught by `230 in apparatus `689 in view of `150 to yield the predictable result of biasing the movement of the sliding the door.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL A. WALDBAUM whose telephone number is (571)270-1860. The examiner can normally be reached on M-TR 6:20-3:50, F 6:30-10:30 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Art Unit: 1792

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A. W./  
Examiner, Art Unit 1792

/FRANKIE L. STINSON/  
Primary Examiner, Art Unit 1792